

# **Air Quality Classroom Resources**

**Compiled by DES Air Resources Division** 

## **Curriculum Guides, Lessons & Activities**

Air Pollution: What's the Solution? Explore ground-level ozone pollution through interactive online teaching unit for Grades 6-9 (www.k12science.org/curriculum/airproj/)

AIRNOW Teachers' Air Quality Resources (http://airnow.gov/index.cfm?action=static.resource)

Air Quality Education Program, Delaware Department of Natural Resources and Environmental Control – Air Quality Management Section (2000)

(www.dnrec.state.de.us/DNREC2000/Divisions/AWM/agm/education/educationprogram.htm)

Biodiesel Curriculum Guide, Grades 4-12

(www.biodiesel.org/pdf files/Biodiesel Curriculum Schools.pdf)

Climate Change – What You Can Do, EPA's School Resource Page for Students, Educators, and Administrators, (www.epa.gov/climatechange/wycd/school.html)

<u>Clean Air Lesson Plans</u>, Grades 4-8 – Georgia's Clean Air Campaign (www.cleanaircampaign.com/for schools/clean air lesson plans/)

<u>Cleaner Cars Module</u> (<a href="http://nsc.org/ehc/mobile/intro.html">http://nsc.org/ehc/mobile/intro.html</a>)

An initiative to encourage responsible car maintenance and driving habits among future drivers; National Safety Council, 1025 Connecticut Avenue NW, Ste 1200, Washington DC 20036 (202)293-2270

Easy Breathers (www.easybreathers.org)

Wisconsin Department of Natural Resources-project funded in part by US EPA, Wisconsin Department of Transportation, and Midwest Express Airlines

Energy Star – Educate Students (www.energystar.gov/index.cfm?c=change light.changealight educate)

Environmental Organization Web Directory (www.webdirectory.com)

Extraordinary Road Trip. Eco-driving tips and understanding the issues. (www.extraordinaryroadtrip.org/)

Northeast Sustainable Energy Association with funding from the US Department of Energy.

Leading the Way to Sustainable Transportation; NESEA, 50 Miles Street, Suite3, Greenfield, MA 01301 Educational Resource Guides for K-12 Teachers, "Cars of Tomorrow and the American Community" (http://nesea.org/education/edmaterials/index.html ); "Getting Around Clean and Green;" Future Wheels for a Sustainable America" (http://nesea.org/education/links.html); and

"Getting Around Without Gasoline" (www.nesea.org/education/edmaterials/GAWG.html)

In the Air, Tools for Learning About Airborne Toxics Across the Curriculum. Missouri Botanical Gardens' EarthWays Center & EPA. {www.intheair.org}

Indoor Air Quality "Tools for Schools" (www.epa.gov/iag/schools/teachers.html)

Energy Education and Training, US Dept. of Energy, Energy Efficiency & Renewable Energy (www1.eere.energy.gov/education/)

National Energy Foundation's Energy Education Links. (www.nefl.org/educators.html)

National Renewable Energy Laboratory education programs (www.nrel.gov/education/)

<u>Planet Polluto</u>. Interactive activity for elementary students. (<u>www.planetpolluto.com/</u>)

<u>Project A.I.R.E.</u> EPA Region 1 Student & Teacher air resources webpage (www.epa.gov/region01/students/teacher/aire.html)

### **Videos**

EPA Region 1 Video Lending Library (<a href="http://yosemite.epa.gov/r1/videolen.nsf/MainForm">http://yosemite.epa.gov/r1/videolen.nsf/MainForm</a>)

#### **Annual Environmental Events**

January: National Radon Month (www.epa.gov/radon/nram/index.html)

April: National Car Care Month (<a href="http://carcare.org/NCCM">http://carcare.org/NCCM</a> )

April 22<sup>nd</sup> – Earth Day (http://earthday.gov/)

May:

Bike/Walk to Work Week (www.bwanh.org)

Tour de Sol (visit Northeast Sustainable Energy Association, www.nesea.org)

Air Quality Awareness Week (mid-May) (www.epa.gov/airnow/airaware/airaware.html)

Asthma Awareness Month ()

# **Classroom Presentations Provided by DES**

Air Quality Monitoring – Overview of the six criteria air pollutants that are monitored in NH in accordance with the Clean Air Act. Focus is on Ozone and Particle Pollution. (Grades: 5-12, Duration: 1 to 1.5 hours)

The Air Quality and Energy Connection – Explores relationship between energy and air quality. Focus is on how individuals can make every day behaviors to keep the air clean. (Grades: K-12, Duration: 1-1.5 hours)

Climate Change – Scientific evidence supports the theory that the climate is changing rapidly as a result of human activity. Explains why scientists are concerned for our future, and what governments, businesses, and individuals can do to try to reverse this change.

(Grades: 5-12 Duration: 1-1.5 hours)

Acid Rain – Air and water are intricately connected. Focus is on where air pollution comes from, how "acid rain" was discovered, and how our communities are being affected. (Grades: 4-12, Duration: 1-1.5 hours)

Ground-Level Ozone – "Smog" (ground-level ozone) is perhaps our most challenging air pollution problem. Focus is on the health effects of ground-level ozone, what the government is doing to reduce it, what you can do to protect your health, and how you can help reduce pollutants that form ozone. (Grades: 2-12, Duration: 1-1.5 hours)

Toxic Air Pollutants – Clean Air Act requires monitoring of six criteria air pollutants, however NH is concerned with over 800 toxic air pollutants.

## **Additional School and Extracurricular Activities**

Clean Air Zones for Schools

(http://des.nh.gov/organization/divisions/air/tsb/tps/msp/irc/categories/education.htm#school\_bus )

### **For More Information**

DES Air Resources – Main Web Site: <a href="http://des.nh.gov/organization/divisions/air/index.htm">http://des.nh.gov/organization/divisions/air/index.htm</a> Kathy Brockett, Education and Outreach (603) 271-6284; kathleen.brockett@des.nh.gov Barbara Fales, Education and Outreach (603) 271-1390; <a href="mailto:barbara.fales@des.nh.gov">barbara.fales@des.nh.gov</a>

New Hampshire's Educators - Doing Our Share For Clean Air!

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